

**Title:** Neurorehabilitation of patients after brain injury at the Day Care Center of The Department of Rehabilitation Medicine

**Abstract:**

Neurorehabilitation represents a complex approach to the patient carried out by an interprofessional rehabilitation team. Neurorehabilitation is particularly important for brain-injury patients suffering not only from motor dysfunction, but also cognitive-communication disorders.

The aim of this thesis is to explore and analyze the methods and options of rehabilitation in improving the functional outcome of persons following a brain injury at the Day Care Center of The Department of Rehabilitation Medicine (DS KRL).

Within the framework of the practical part of my thesis, the research was carried out using content analysis of the medical records of 37 patients who visited DS KRL from November 2010 until March 2012. In most cases, they were persons after a vascular brain injury. Acquired data were evaluated by percentages and displayed graphically.

Examination of input and output data of the FIM test exposed a relationship between the degree of improvement in FIM and the age of patients, where the percentage improvement of people of younger ages were higher than those of older age. It was also observed that the biggest improvement occurred in patients with a delay between the brain injury and admission to the Day Care Center of 1-2 years. These results partially support the hypothesis that improving self-sufficiency is dependent on the age of patients, on the length of stay the Day Care Center, and the time lag between the brain injury and the date of admission to the Day Care Center.

**Key words:** neurorehabilitation, vascular brain injury, trauma, physiotherapy methods, Day Care Center